

EQ: What are the measures of central tendency, and how do we find them?

The measures of central tendency are _____, _____, and _____ (and sometimes _____).

Mean is just another word for _____. Add up all the values, and then divide by the number of values you added.

Median is another word for the _____ term. Make sure all of the values are listed in order from smallest to largest.

Mode is the value that shows up the _____. There can be more than one mode (that is, if two or more values show up the same number of times).

The measures of central tendency can be found from lists, frequency tables, stem-and-leaf plots, and other types of graphs.

Example 1: The following are the test scores Matt Mitarnowski earned in the first marking period in his math class:

75 99 83 76 89 97 84 83 85 96 83

Find the mean, median, and mode for this set of data.

a. Mean:

b. Median:

c. Mode:

d. Range:

e. Which of the measures of central tendency gives the best approximation of all of Matt's scores? Why do you think so?

Example 2: Use the graphing calculator to find the mean, median, mode, and range for the following list, which gives the annual tuition fees at six colleges:

\$12,560 \$14,300 \$13,750 \$12,400 \$13,680 \$15,420

Mean:

Median:

Mode:

Range:

Which measure of central tendency is the best indicator of the typical annual tuition fee for these colleges? Why do you think so?

Example 3: Find the measures of central tendency for the following scores:

77 58 77 91 68 63 69 86 85 45 77 74

Mean:

Median:

Mode:

Range:

Steps for using the TI-83/TI-84: